

# **COLOUR TELEVISION**

**Operating Instructions**

# List of contents

<b>❶ Special features .....</b>	<b>2</b>
<b>❷ Safety instructions .....</b>	<b>3</b>
<b>❸ Getting started .....</b>	<b>4</b>
Aerial connection .....	4
Switching on.....	4
Battery fitting .....	4
<b>❹ Control unit .....</b>	<b>5</b>
Front and rear panel .....	5
Remote control.....	5
<b>❺ Using the TV .....</b>	<b>6</b>
TV controls.....	6-7
Tuning the television.....	8
Manual tuning.....	8
Automatic tuning.....	8
Fine tuning.....	8
Childlock.....	9
Program organising.....	9
<b>❻ TV setup .....</b>	<b>10</b>
Picture menu.....	10
Features menu.....	10
Sleep timer.....	10
On timer.....	10
AVL.....	11
Language.....	11
Picture format.....	11
Normalization.....	11
<b>❼ Using teletext .....</b>	<b>12-13</b>
<b>❽ Connecting external equipment .....</b>	<b>13-14</b>
<b>❾ Help and service tips .....</b>	<b>15</b>
<b>❿ Technical specifications table .....</b>	<b>16</b>

# Television

Thank you for buying this television which is designed to give you many years of satisfactory service.

You may already be familiar with using a television but do please take time to read these instructions. They are designed to familiarise you with the unit's many new features and to ensure you get the very best out of your purchase.

## ① Special features

- Automatic Programming
- 100 Programme Memory
- Available for Cable Channels (A decoder may be required)
- Manual Fine Tuning
- Skipping back to the last channel you have started to zapp via only one button (SWAP).
- 16:9 picture format
- Scart Socket: Video cassette recorder, satellite receiver, video disc player,DVD, TV games or a home computer can be connected to this AV socket with an appropriate connecting cable.
- Normalization system to recall the setting in memory after the colour,contrast, brightness setting have been changed.
- Automatic Volume Limiting.
- Infrared Remote Control.
- Your TV will automatically switch off if it's been programmed from 15 to 120 minutes.
- Automatically switch to Stand by five minutes after a channel ceases to transmit.
- Multi language menu system.
- Naming the channels (Automatic with ATS).
- NTSC playback.
- S-VHS via Scart.
- ATS: Automatic Tuning System with country selection (\*).
- Audio/Video RCA sockets (\*).
- Headphone socket (\*).
- Teletext reception (\*).
- Zapping (\*).
- On Timer (\*).
- I.P.S.: Intelligent Programme Switch: You can set your TV to skip to a specific channel at a specific time. It works also as an alarm function (\*).
- Childlock (\*).

Please Note: Zapping, I.P.S., Childlock are optional if ATS exists.

(\*) : These features are not available in all models.

# Safety is Important

Your safety and the safety of others is important. Please, therefore, ensure you read the Safety instructions before you operate this television.

## ② Safety instructions

### ⚠ Read all the safety instructions before first use of your TV.



- Position the television so that direct light does not fall on the screen. Excessive light will cause a washed out effect.



- Position the power supply lead and other leads so that they are not likely to be walked on or pinched by things placed on or against them.



- Do not use the appliance in humid or damp conditions. Do not allow the appliance to get wet, i.e. dripping or splashing, as this may be dangerous. Do not place water filled objects, such as vases and flower top on top of the appliance.



- Make sure that no naked flame sources, such as lighted candles, are placed on top of the appliance.
- Do not place the television near heat sources such as radiators, ovens, stoves, etc.



- Do not use the television near any apparatus that produces a magnetic field such as HI-FI speakers or electric motors otherwise colour purity may be affected.



- The heat built up in the set escapes through ventilation holes, so do not cover the set by drapes, clothes etc. that may block air circulation. Do not place the television on carpet or soft furnishings.
- NEVER let children push anything into the holes or slots on the case.



- Clean the TV Screen using a slightly damp cloth or chamois leather. Never use abrasive cleaning agents like liquid or aerosol cleaners.
- Remove the mains plug from the socket outlet while cleaning.



- If you wish to place the television on a shelf or in a wall unit always ensure there is a minimum air gap of 8 cm around the top, sides and rear of the television, to assist ventilation.



- Your TV set is designed to operate with mains voltages 230V AC; 50Hz. Do not connect your TV set to power sources other than the mains supply.

## ③ Getting started

Remove your Television carefully from the box. You may wish to store the packaging for future use.

### In the box

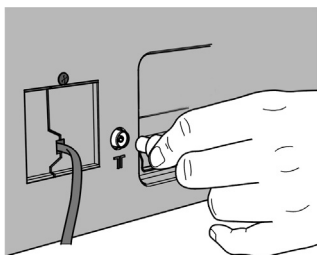
Inside your this package you should have:

- Television
- Remote control
- User guide
- AAA batteries x 2

**Read these instructions before use.**

### Aerial connection

To connect an aerial, plug the aerial lead into the aerial socket on the rear of the TV.



You can use an outdoor or indoor aerial. However, if you use an indoor aerial the quality of the reception may be reduced and adjustment of the aerial may be required when changing programs.

#### Please note

If you live in a poor reception area or use an indoor aerial you may experience loss or corruption of teletext transmissions.

### Switching on

#### Mains power

Connect the mains plug into the mains socket and switch on.

Connect the TV mains plug into your domestic mains socket outlet (230 V 50 Hz AC).

#### Please Note

When your TV is not in use disconnect the plug from the mains power supply.



Press the **Power** button on the front of the TV. The standby indicator will illuminate.

Press the **Program up, Program down** button or Numeric Buttons on the remote handset to switch the TV on.

The standby indicator remains on. The picture will appear after a few seconds.

### Switch off



Press the **Standby** button to switch the TV to standby. The standby indicator will brighten.

#### Please Note

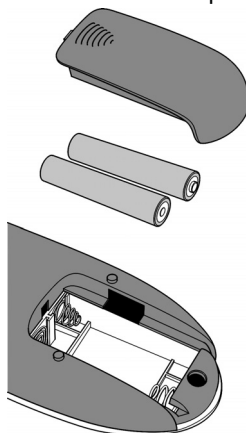
Do not leave the television on standby unattended or overnight.

### Switching the TV on for the first time

To install your TV, please read the sections "Tuning the television".

### Battery fitting




Insert the 2 AAA Batteries supplied into the compartment on the rear of the remote control, ensure you follow the polarity diagram inside the compartment.







# 4 Control Unit

## Front and rear panel

14" (37 cm), 15" (38 cm) 20" (51 cm) and 21" (55 cm) TV sets:


-  --- Program/Volume increase button
-  --- Program/Volume selection button: This button allows you to select program or volume mode on the front panel.
-  --- Program/Volume decrease button

20" (51 cm), 21" PF (55 cm) TV sets:

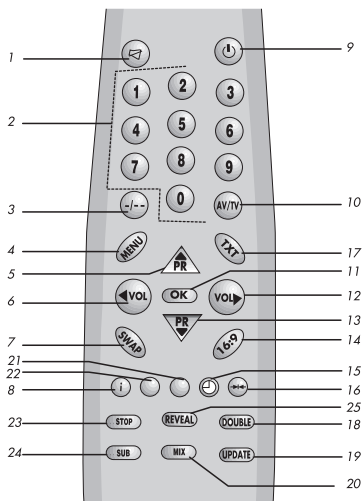
-  -----Volume decrease button
- VOL**
-  -----Volume increase button
-  -----Program decrease button
- PR**
-  -----Program increase button

### General

 Power ON/OFF switch

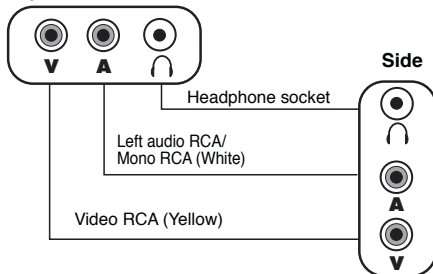
 Stand by indicator

## Remote control



## External Connections: (Front or side)

### Front



### External connections: (Rear)

 AV1 scart  Aerial socket



Power cable

Please note:

The Audio/Video RCA and Headphone socket can be placed on the front panel or on the right-hand side of the cabinet depending to the model of your TV.

1. MUTE button
2. Ten key program button
3. Two digit program button (-/-)
4. MENU button
5. Program up button
6. Volume decrease button
7. Return to selected programme button (SWAP)
8. Information button (i)
9. STAND-BY button
10. AV-TV selection button
11. OK button
12. Volume increase button
13. Program down button
14. 16:9 picture format button
15. Sleep timer button
16. Normalization button

### For Teletext Function (Opt.)

15. Yellow fastext button
16. Blue fastext button
17. Teletext/TV select button
18. Enlarge button
19. UPDATE button
20. MIX button
21. Green fastext button
22. Red fastext button
23. STOP button
24. SUB-PAGE button
25. REVEAL button

# 6 Using the TV

## TV controls

### Program selection

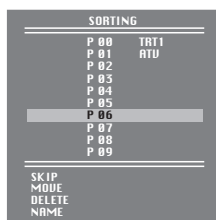


Press the **Program up** or **Program down** buttons on the TV or remote control or press a **Numeric** button to select a programme.

To select a programme whose number is greater than 9 using the numeric buttons, press the **-/--** button first and then press the two Numeric buttons. For example, to select programme 12, press the **-/--** button followed by 1 and then 2.

Optionally you can also select a program by pressing in the OK button (by ATS included models only).

Press the **OK** button and program list will appear on the screen with programme numbers on it.



Use the **Program up** and **Program down** buttons to scroll through the program list.

Press the **MENU**, **TXT**, **16:9** or **i** button to close the program list.

### Volume



Press the **Volume up** or **Volume down** button on the front panel of the TV or press the **◀Vol** or **Vol ▶** button on the remote control. A sound level bar will appear on the screen.

### Mute



To mute the sound press the **Mute** button on the remote control. A loudspeaker symbol will appear on the screen.



Press the **Mute** button again to restore the sound. The symbol will disappear.

Pressing **Volume down** buttons will decrease the volume without restoring.

But pressing the **Volume up** button will increase the volume with restoring.

### ZAPP Function (Optional)



Select the programme you would like to recall by pressing **SWAP** button. Selected programme number will appear on the upper left side of the screen. Watching any programme, you can recall the selected one by pressing **SWAP** button again. If you press **SWAP** button again, you can recall the last programme you watched. You can cancel ZAPP function by pressing **INFO** button.



### SWAP



Allows you to swap between the program you are watching and the last selected program. i.e. If you were watching Program 1 and change to Program 11, press the **SWAP** button to go back to Program 1. Press it again to return to Program 11.



Note: If Zapping function is available **SWAP** function will not work.

### Info



By pressing the **"WHITE (i)"** button the programme number and programme name (if it exist) will appear on the screen. This will disappear automatically after a few seconds.

### AV

For use when you are connecting an external source to your TV (Video recorder, DVD player etc.) via the SCART sockets or RCA sockets.

See 'Connecting external equipment'.



Press the **AV/TV** button to select your input as follows:

- 1 AV1 when using SCART socket 1.
- 2 AV1 S-VHS for S-Video equipment to scart 1 (S-VHS / Scart adapter is needed).
- 3 AV2 when using the RCA sockets of the TV. (Optional)



Press the **AV/TV** button again to return to TV.

## Tuning the television

There are two ways of tuning your television:

- Manual, where you control the tuning process or Autoprogram where the television does it all automatically.
- The TV sets equipped with ATS (Automatic Tuning System) sorts the channels regarding the broadcasting system of your country (optionally).

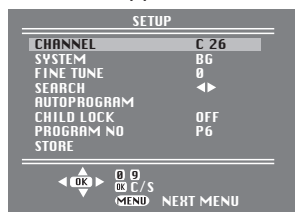
### Please Note

If the TV is set to a channel with no signal the TV will return to standby after 5 minutes. The time remaining is displayed on the screen.

## Manual Tuning

Tuning the TV is accessed through the **SETUP** menu.

**To access the SETUP menu:**  
Press the **MENU** button twice. **SETUP** Menu will appear.



**a) If you don't know the channel number (Tuning with SEARCH function).**

Enter the **SETUP** Menu by pressing the **MENU** button twice.



In the **SETUP** Menu select **PROGRAM NO** and change to **P1** using the **Program down** button to select it and the **Volume up** or **Volume down** button to change it.



Starting with Program **P1**, tune in the first channel as follows:  
Use the **Program up** button to select **SEARCH**.

Press the **Volume up** or **Volume down** button to start the tuning search.

The search arrow will appear.

When the search finds a strong searching. The picture will appear, channel signal it will stop.

Identify which channel you are watching (BBC 1, ITV 1 etc.) and decide which program number you want it to be.



Use the **Program down** button to select **PROGRAM NO**.

Use the **Volume up/down** buttons to select the program number.

Use the **Program down** button to select **STORE**. Press the **OK** button and **STORED** will appear on the **STORE** line.

You have now stored the first channel.

Use the **Program up** button to select again **SEARCH** and continue the tuning procedure until you have tuned in all the programmes you want or the television can receive.

**b) If you know the channel number. (Tuning with channel numbers)**

Enter the **SETUP** menu by pressing **MENU** button twice.



Press the **OK** button to select "**S**" for cable channels and "**C**" for terrestrial broadcast.

Use **Volume up/down** button to select the channel number or enter the channel number using the Numeric buttons.

Use the **Program down** button to select **PROGRAM NO**.



7

Enter the desired program number by using the Ten key program buttons

VOL

Use the **Volume up/down** buttons to select the program number.

VOL

Use the **Program down** button to select STORE. Press the **OK** button and STORED will appear on the STORE line. The channel will be stored with the program number you desired.

PR

OK

You have now stored the first channel.

PR

Use the **Program up** button to select again CHANNEL and continue the tuning procedure until you have tuned in all the programmes you want or the television can receive.

TXT

To exit the SETUP menu press the TXT button.

### Please note

The system will displayed automatically on SYSTEM row i.e.BG, L, I, DK depending the receiving broadcasting system of the country. In some countries the broadcasting system can be both in BG/DK or BG/LL'.Only the TV sets provided with Pal Secam BG/DK or Pal Secam BG/LL' systems can receive both BG/DK or BG/LL' broadcasts.

### Please note

If you do not press any buttons for 15 seconds the TV will exit the menu system.

## Automatic Tuning (Autoprogram)

Enter the SETUP menu as before.



PR

Use the **Program down** button to select AUTOPROGRAM and press the **OK** button.

OK

### Please Note:

a) On the TV sets equipped with ATS a COUNTRY SELECTION menu will appear.

Select the desired country using **Program** and **Volume** buttons.

Press the OK button to select the country and press the OK button again the Automatic Tuning System regarding the broadcasting system in the desired country.

b) On the TV sets without ATS pressing the OK button starts AUTOPROGRAM.

OK

When you are sure the aerial is connected properly press the **OK** button and to confirm it press **OK** button again.

MENU

To cancel Autoprogram whilst it is working press the Menu button. As Autoprogram stores a channel it will appear briefly on the screen.

**Your TV is now tuned and ready to use.**

### Please note:

If auto sort fails to arrange the programmes in the required sequence please refer to programme organising. See the Program Organising.

## Fine Tuning

Although the search and Autoprogram will automatically try and tune to the best reception, in areas of poor reception a bit of fine tuning may be required.

PR

In the SETUP menu use the **Program down** button to select FINE TUNING. Use the **Volume up** and **Volume down** buttons to fine tune.

VOL


VOL

PR

When you have finished use the **Program down** button to select STORE and press the **OK** button.

OK

## Child lock

Childlock switches off the programme you are watching when you select it. All other programmes are unaffected. If you go back to the programme with childlock on you will see a black screen with the OSD showing (  ). You can lock as many programs as you want.



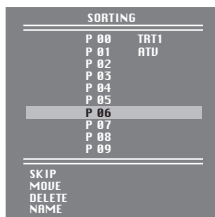
Press the **Volume up** button to switch the Child lock on or off.

## Program organising

Once you have tuned in all the channels you want, you can change their programme number, if required, and name them.



To enter the SORTING menu press the **OK** button.



PROGRAM 01 will be selected and the channel stored under PROGRAM 01 will be showing on the screen.

The details of the program will be shown across the top of the screen i.e. P1 CH31.

The buttons used to edit the programs are shown at the bottom of the display:

- Red button - Skip
- Green button - Move
- Yellow button - Delete
- Blue button - Name

### To name the programmes



Press the **Blue** button, the selected line will turn blue and the CH will be highlighted.

Use the **Program up** and **Program down** buttons to select the letters and numbers and the **Volume up** and **Volume down** buttons to move through the name.



Press the **Blue** button again to store the name.

Repeat this process to name all the programmes.

### Please Note

Some TV channels may send their names with teletext transmission. In this case their names will be automatically shown on the name line.

### To move the programmes

You can move the programmes around the programme list to the order you want



Select the programme you want to move and press the **Green** button. The programme will turn to green.

Select the number you want to move the programme to and press the **Green** button again and the programme will be moved to that number.

All the following programmes are shifted down by one place.

### To delete a programme



To delete a programme, select it and press the **Yellow** button, the programme will be deleted. All the following programmes are shifted up by one position.

### To skip the programme

Press the **Red** button, the selected line will turn red. Skipped programmes will not appear when you move through the program list using the Program up or Program down buttons. They can still be selected using the numeric buttons or **OK** of button.

Press the **Red** button again to unskip the programme.

## ⑥ TV set up

The TV set up is accessed through a menu system.

Once you have stored your set up, this is the set up the TV will default to when you switch it on.

### Please note

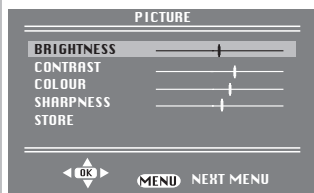
If you do not press any buttons for 18-19 seconds the TV will exit the menu system.

### There are three menus;

- Picture Menu
- Setup Menu
- Features Menu

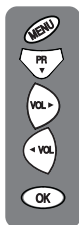
### • Picture Menu

To reach the picture menu press one time to MENU button.



The picture menu allows you to set up the following:

BRIGHTNESS  
CONTRAST  
COLOUR  
SHARPNESS  
STORE



To change, for example, the colour, select it using **Program down** buttons.

Use the **Volume up** and **Volume down** buttons to change the setting.

To save your settings, select STORE and press the **OK** button. STORED will be displayed.

### Note:

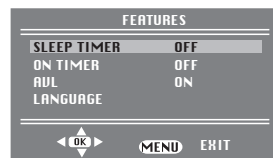
If you play NTSC formatted tape from the scart, the TINT menu will appear to adjust the TINT level.

### • Setup Menu

Setup Menu is explained on the page 8

### • Features Menu

To reach the feature menu press three times to MENU button.



### a) Sleep Timer

The sleep timer automatically switches the set to stand-by after the preset time has elapsed.

You can select the time from 15 to 120 minutes with 15 minutes steps.

There are two ways to set the sleep timer;

1- Select the SLEEP TIMER in the FEATURES menu. Select the desired time by using **Volume down** or **Volume up** buttons.

2- You can also use the YELLOW (⦿) button on your remote control to select this function. You can increase the switch off time interval by pressing this button repeatedly.

### Notes:

The last 60 seconds of the desired switch off time by counting from ⦿ 59 down. When this time interval has elapsed the set will switch to STAND-BY.

To view the remaining sleep time, press YELLOW (⦿) button. To cancel the sleep time select OFF in SLEEP TIMER.

### b) On Timer

You can select the on time between 30 minutes to 12 hours by pressing numeric buttons or AV button.

If TV is at Stand-by position, you can switch it on at desired time and programme by activating the ON TIMER feature.

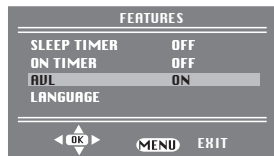
To cancel the on time select off in ON TIMER.

### c) AVL:

TV transmitters have different sound levels. AVL (automatic volume limiting) maintains the same sound level as you switch from program to program.

From the features menu you can select AVL button by pressing **Program down** button.

To supply this press **Volume up** or **down** button and select ON for AVL.



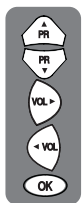
### d) Language

There are many languages available for the On Screen Displays (OSD).



In the features menu select Language by **program down** button.

Press the **OK** button to select the language list.



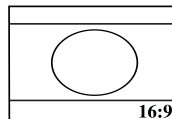
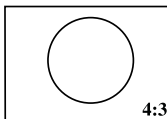
Press the **Program up/down** or **Volume up/down** buttons to page through all the languages and **OK** to select.

### Picture format

This allows you to select the picture of your TV.


Available formats of TV sets are 4:3 and 16:9.

You can change the picture format to 16:9 to able to watch the inputs in 16:9 format, i.e. some broadcasts and DVD's by pressing 16:9 button.



Press the **16:9** button to see the chosen format on the lower center right side of the screen and press the **16:9** button again to change the picture format.

### Normalization

• Whilst watching TV you may change the picture. While restore the original picture setting press the BLUE  button on the remote control.

## 7 Using Teletext

Teletext is an information system that displays text on your TV screen. Using the teletext control buttons you can view pages of information that are listed in the teletext index (Teletext reception is optional).

### Please Note

No on screen display is available in text mode. The contrast, brightness and colour cannot be changed but the volume control is still available.

### To enter Text mode

#### Please Note

Make sure the TV channel you are watching transmits teletext.



Press the **TEXT** button. The text page will appear, normally the index page.

### To exit Text mode



Press the **TEXT** button. The TV will return to the channel you were watching.

### To select a page of text



Find the number of the page in the index and enter it using the **Numeric** buttons. The number of the page will appear in the top left hand corner of the screen.



The page counter will search for your page. When it finds it, the page will be displayed.



To move to the next page of text press the **Program up** button.

To move to the previous page press the **Program down** button.

### TV/text mix



To view a page of text whilst watching a TV programme press the **Mix** button. The text will be superimposed over the TV programme.

Press the **Mix** button again to return to the text page.

### Page search whilst watching TV



In Text mode press the Update button. The TV will return to TV mode with the text page number in the top left hand corner of the screen.



Enter the page number you want using the **Numeric** buttons. The top line of the text page will appear whilst the text searches for your page. When the page is found the number will remain in the top left hand corner of the screen.



Press the **Update** button to view your selected page of text.

### Double height text



If you have difficulty reading the text on the TV you can double the height of the text.



Press the **Double** button. The top half of the page will be displayed in double height text.



Press the **Double** button again. The bottom half of the page will be displayed in double height text.

Press the **Double** button again to return to the full page.

### Page hold



If the page of text you have selected contains sub pages, these sub pages will automatically be displayed in order with a delay to allow you to read the page.



To stop the move to the next sub page press the **Stop** button. STOP will appear in the top left hand corner.

To continue moving through the sub pages press the **Stop** button again.

## To select a sub page



If the page of text you are viewing contains sub pages, the number of the sub page you are on and the total number of sub pages is displayed on the right of the screen i.e. 1/7.



To select a sub page press the **Sub** button. The number in the top left hand corner will be replaced by S followed by 4 asterisks.



Enter the number of the sub page, using the **Numeric** buttons in the format S0001 for sub page 1.



The teletext will search for the sub page. This may take some time. To return to the TV whilst the teletext is searching press the **Update** button.

When the page number is found it will appear in the top left hand corner of the screen.

Press the Update button again to view the text page.

## To reveal information



Press the **Reveal** button to reveal concealed information (quiz answers etc.).



Press the **Reveal** button again to conceal the information again.

## Clock



Press the **Sub** button, whilst watching a TV program, to display the time.

## Fastext

At the bottom of the teletext screen is a row of subject headings in red, green yellow and blue.

The remote control has a row of coloured buttons corresponding to the row of coloured subjects on the screen. Pressing one of the coloured buttons will take you directly to the page corresponding to the subject heading.

# ⑧ Connecting external equipment

You can connect a wide range of audio and video equipment to your TV.

## Headphones

The headphones must have an impedance of between 8 and 32 ohms and have a 3.5 mm stereo jack plug.

Plug the headphone jack into the headphone socket of the TV.

## Connecting Video Recorder, DVD Player, Decoder.

### ① Via SCART

Make sure the TV and video recorder are both switched off.

Plug one end of the SCART lead (not supplied) into the back of the video recorder and the other end into the SCART socket on the back of the TV.

Switch on the video recorder and the TV.



Press the **AV/TV** button on the remote control to select AV1.

### Please note:

You can connect a RGB external equipment via Scart 1. It is necessary to use full Scart cable for this purpose.

Select the video outputs of external device by using its menu to RGB if it's available.

You can also play NTSC formatted tape from scart (Optional).

### ② S-Video Player

If you have an S-Video player you can connect it to SCART socket 1 via an adaptor from scart to S-Video/RCA audio (not supplied).



Press the **AV/TV** button two times to select AV1 S-VHS.

### ③ Via RCA lead

Make sure the TV and video recorder are both switched off.

Plug one end of the RCA lead into the video and audio out sockets on the back of the video recorder and plug the other end into the video and audio in sockets of the TV.

#### ④ Via aerial socket (Only for Video Recorder)

Make sure the TV and video recorder are both switched off.

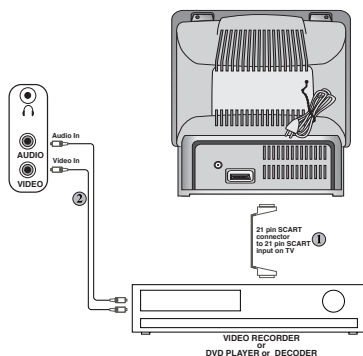
Unplug the aerial lead from the TV and plug it into the aerial socket on the video recorder (if fitted).

Plug a coaxial plug into the RF out socket on the rear of the video recorder and plug the other end into the aerial socket of the TV.

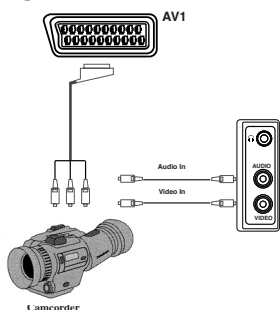
Switch on the video recorder and the TV.

If your video recorder has a test signal, switch it on. (Refer to the video recorder user guide).

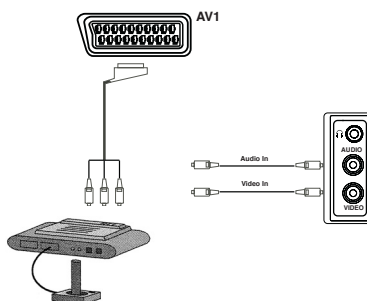
See 'Tuning the TV' and carry out the tuning procedure for the video recorder test signal. Select a programme number 0 or between 55 and 99.



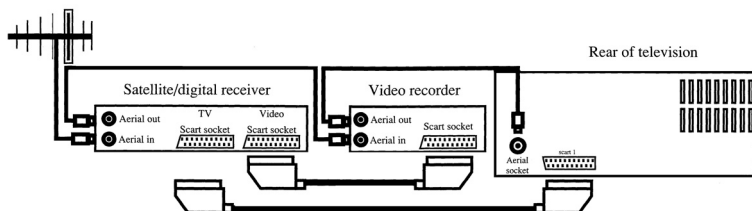
#### Connecting TV with camcorder



#### Connecting TV games and computer



#### Connecting TV with video and satellite/digital receiver



# ⑨ Help and service tips

## The TV does not work

Make sure it is plugged into the mains supply and switched on.

## Poor picture

- Is the aerial plugged in?
- If you are using a set top aerial is it properly aligned for the best signal.
- Make sure the aerial is not too close to neon lights, loudspeakers etc.
- Try changing the direction of the outdoor aerial. High buildings and mountains can cause ghost pictures or double images.
- The picture quality may be reduced by connecting two external sources at once. Disconnect one of the sources.
- Adjust the fine tuning.

## No picture

- Is the aerial plugged in properly?
- Is the aerial lead damaged?
- Are all the plugs in the aerial lead fitted correctly?
- Have you pressed the correct buttons on the remote control?

## No sound

- Is the sound muted? Press the Mute button.
- Is the volume turned down?
- Are there headphones connected?

## Sound coming from only one speaker

- Is the balance set to one side? See the sound menu.
- If you have external speakers, has one of them become disconnected.

## No response to the remote control

- Try changing the batteries.
- Is there an obstruction between the remote control and the sensor on the TV.

## If nothing works

If you have tried the above solutions and none seem to work, try switching the unit off and on again.

If this does not work contact your supplier or TV repair technician. Never attempt to repair a defective TV yourself.

Symptoms	Solutions											
	Check if on/off switch is "on"	Try a different channel, if OK, probably station trouble	Check aerial connections on back of set	Check aerial broken wires	Re orientate aerial	Probably local interference, such as an appliance	Adjust fine tuning control	Adjust brightness control	Adjust contrast control	Check if station is broadcasting colour	Adjust colour control	Check batteries in the remote control handset.
No picture, no sound	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Poor sound, picture OK	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Poor Picture, sound OK	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Weak picture	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Blurred picture	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Double image	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Lines in picture	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Distorted picture	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Weak reception on some channels	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Horizontal bars	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Picture rolls vertically	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Poor colour	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
No colour	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Remote control not working	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
TV does not accept any command	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Teletext rolling up/down	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Inappropriate colour, color spots	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓



# ⑩ Technical specifications table

Picture tube size/type	14" 4:3	15" PF	20" 4:3	21" 4:3	21" PF
Screen size	37 cm	38 cm	51 cm	55 cm	55 cm
Visible screen size	34 cm	36 cm	48 cm	51 cm	51 cm
Sound Output (%10 THD)	2 W	2,5 W	2,5 W	2,5 W	2,5 W
Power consumption	30 W	45 W	45 W	45 W	45 W
Stand by Power consumption	4 W	4 W	4 W	4 W	4 W

## General technical specifications

### Power Supply

AC:.....230-240V 50Hz

Number of preset programmes.....100

RF Aerial input.....75 ohm (unbalanced)

Speaker empedance.....8 ohm

Audio output .....Mono

Batteries.....2xAAA

Receiving channels.....VHF (Band I Channels 2-4)

.....VHF (Band III Channels 5-12)

.....UHF (Channels 21-69)

.....Cable TV (S1-S20/S21-S41)

Receiving broadcast system.....PAL BG

PAL SECAM BG

PAL SECAM BG DK/DK'

PAL SECAM BG LL'

PAL I

### Please note:

Your TV set is produced to receive only "one" of this colour and sound system options which is based on your country's norms and can not be changed by user except BG/DK and BG/LL' if both systems are available to receive (BG or DK and BG or LL'). Please refer to "Tuning the TV".